

What is Claimed is:

1. A positive electrode active material containing lithium composite manganese oxide having spinel structure for a non-aqueous electrolyte cell whose primary particle diameter is not less than $0.05\ \mu\text{m}$ and not greater than $10\ \mu\text{m}$, forming an aggregate, and whose specific surface measured by the BET method is not less than $0.2\ \text{m}^2/\text{g}$ and not greater than $2\ \text{m}^2/\text{g}$.

2. A positive electrode active material as claimed in Claim 1, wherein said lithium composite manganese active material is expressed by a general formula $\text{Li}_x\text{Mn}_{2-y}\text{M}_y\text{O}_4$ (wherein $0.90 \leq x \leq 1.4$, $y \leq 0.30$, and M is one or more materials selected from a group consisting of Ti, V, Cr, Fe, Co, Ni, and Al).

3. A production method of a positive electrode active material for a non-aqueous electrolyte cell, wherein a starting raw material of lithium composite manganese oxide is mixed with a predetermined composition, molded with a pressure, and sintered at a temperature not lower than 600°C and not higher than 900°C .

4. A non-aqueous electrolyte secondary cell comprising:
a positive electrode containing as a positive electrode active material a lithium composite manganese oxide having spinel structure and whose primary particle diameter is not less than $0.05\ \mu\text{m}$ and not greater than $10\ \mu\text{m}$, forming an aggregate,

and whose specific surface measured by the BET method is in a range not less than 0.2 m²/g and not greater than 2 m²/g,

a negative electrode, and

an electrolyte.

5. A non-aqueous electrolyte secondary cell as claimed in Claim 4, wherein the negative electrode contains a material capable reversibly doping and dedoping lithium.

6. A non-aqueous electrolyte secondary cell as claimed in Claim 5, wherein the material capable of reversibly doping and dedoping lithium is at least one selected from a group consisting of a carbon material, metal lithium, lithium alloy, polyacene, and polypyrrol.

7. A non-aqueous electrolyte secondary cell as claimed in Claim 6, wherein the carbon material is at least one selected from a group consisting of pyrocabon, coke, glassy carbon, organic polymer compound sintered body, and carbon fiber.

8. A non-aqueous electrolyte secondary cell as claimed in Claim 4, wherein the electrolyte is at least one selected from a group consisting of LiClO₄, LiAsF₆, LiPF₆, LiBF₄, LiB(C₆H₅)₄, LiCl, LiBr, CH₃SO₃Li, and CF₃SO₃Li.

all pz

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	